

The Claims

Claims 1-17 canceled.

18. (Original) A data reading device comprising a housing; a first window disposed on a first side of the housing; a rotating facet wheel within the housing, the facet wheel having a facet wheel axis and a plurality of primary mirror facets;

a light source producing a reading beam directed onto the facet wheel;

wherein the rotating facet wheel includes at least one corner between a pair of adjacent facets, the corner comprised of first and second corner facets disposed at an inward angle relative to the primary mirror facets, the first and second corner facets intersecting to form a line which is generally coplanar with the facet wheel axis.

19. (Original) A data reading device according to Claim 18 wherein as the facet wheel is rotated the reading beam traverses the corner facets to produce a more slowly scanned scan line segment which is directed out of the device, the scan line segment being formed by double reflecting the reading beam, firstly off the first corner facet then off the second corner facet and out the device as the reading beam traverses the first corner facet.

20. (Original) A data reading device according to Claim 19 wherein the scan line segment is further formed by double reflecting the reading beam, secondly off the second corner facet then off the first corner facet and out the device as the reading beam traverses the second corner facet.

21. (Original) A data reading device according to Claim 18 wherein the facet wheel comprises four primary mirror facets and only one corner.

22. (Original) A method of producing a scan line comprising the steps of:

arranging a facet wheel with a plurality of primary mirror facets;

arranging a corner between a pair of the mirror facets, the corner comprising first and second corner facets disposed at an inward angle relative to the primary mirror facets;

rotating the facet wheel;

directing a light beam onto the rotating facet wheel;

scanning the light beam by double reflecting the light beam impinging on the first and second corner facets, wherein the light beam impinging on the first corner facet is reflected off the first corner facet and onto the second corner facet and out into a scan volume, and wherein the light beam impinging on the second corner facet is reflected off the second corner facet and onto the first corner facet and out into the scan volume.

23. (Original) A data reading system comprising a reader unit having an upper housing section, a tapered lower housing section, and a window in the upper housing section, the reader unit being hand-holdable during a handheld mode of operation;

a base unit having (a) a lower base section supportable on a support surface and (b) an upwardly open cup portion, the tapered lower housing section being removably insertable into the cup portion for supporting the reader housing during a hands-free mode of operation, wherein the cup portion being adjustably connected to the lower base section for allowing

orientation adjustment of the reader unit during hands-free mode of operation.

24. (Original) A data reading system according to Claim 23 further comprising a swivel section disposed between the cup portion and the lower base section for providing the orientation adjustment of the reader unit during hands-free mode of operation.

25. (Original) A data reading system according to Claim 23 wherein the reader unit is constructed and arranged with a low center of gravity for providing stability when disposed in the cup portion of the base unit.